

Table 13
Summary of U.S. Access Lines by Cost Area

	<u># OF ACCESS LINES</u>	<u># OF LECs</u>	<u># OF STATES</u>	<u># OF SCHOOLS</u>
HIGH = >114%	38,077,637 (24%)	846	45 + 3*	(data pending)
MID = 85-114%	69,962,757 (44%)	548	(data pending)	(data pending)
LOW = <85%	51,669,529 (32%)	40	(data pending)	(data pending)
TOTAL	159,709,923	1434	50 + 4*	

Interpretation Notes:

* The data covers 50 states in addition to the District of Columbia and three territories (Virgin Islands, Puerto Rico, and Micronesia)

Using the criteria for cost of service based on the national average cost per loop of local exchange carrier study areas, it is obvious that the 7-state study does not accurately reflect the national distribution of cost areas. When all LEC study areas are divided into the three cost categories of >114% of the national average, 85-114% of the national average, and <85% of the national average, the 7-state study data show a preponderance of schools in the mid- and high cost categories.

Table 14
Access Lines and % of Schools by Cost of Service Category

	<u>% OF U.S. ACCESS LINES</u>	<u>% OF SCHOOLS IN 7-STATE STUDY</u>
HIGH = >114%	24%	37%
MID = 85-114%	44%	61%
LOW = <85%	32%	2%

This, however, merely indicates the geographic specificity with which cost areas are determined and serves to underscore the diversity of situations that exists from state to state and school to school.

Appendix of Additional Tables and Notes on Methodology

Table 14
Distribution of Schools by Free Lunch Category and Locality

	<u><1%</u>	<u>1-19%</u>	<u>20-34%</u>	<u>35-49%</u>	<u>50-74%</u>	<u>75-100%</u>
Large Central City	<1%	3%	3%	2%	4%	5%
Mid-Size Cent City	<1%	6%	5%	4%	5%	3%
Fringe-Large City	<1%	6%	3%	1%	2%	1%
Fringe-Midsize City	<1%	3%	2%	2%	1%	<1%
Large Town	<1%	<1%	<1%	<1%	<1%	<1%
Small Town	<1%	3%	5%	5%	4%	1%
Rural	<1%	5%	5%	4%	4%	<1%

Interpretation Notes:

This table is based on only those schools included in the service areas of the local exchange carriers for whom tariffs were collected in each of 7 states. Total number of schools: 8814

Table 15
Definition of Locality Categories
used in the Common Core Dataset

Large City:	Central city of a Metropolitan Statistical Area (MSA) with a population greater than or equal to 400,000 or population density greater than or equal to 6,000 people per square mile.
Mid-size City:	Central City of an MSA with a population less than 400,000 and a population density less than 6,000 people per square mile.
Urban Fringe of a Large City:	Place within an MSA of a Large Central City and defined as urban by the Census Bureau.
Urban Fringe of Mid-Size City:	Place within an MSA of a Mid-size Central City and defined as urban by the Census Bureau.
Large Town:	Town not within an MSA, with a population greater than or equal to 25,000.
Small Town:	Town not within an MSA and with a population less than 25,000 and greater than or equal to 2,500 people.
Rural:	A place with less than 2,500 people and coded rural by the Census Bureau.

Table 16
Summary of Number of Exchange Carriers by Cost Area
in the 8-State Study Area

Missouri:

44 EC's in Missouri: 34 (77%) were High Cost (>114%)
 10 (23%) were Mid-Cost (85-114%)
 0 were Low-Cost (<85%)

Nebraska:

42 EC's in Nebraska: 29 (69%) were High Cost
 12 (29%) were Mid-Cost
 1 (2%) was Low-Cost

Nevada

14 EC's in Nevada: 8 (57%) were High Cost
 3 (21%) were Mid-Cost
 3 (21%) were Low-Cost

Maine

19 EC's in Maine 11 (58%) were High Cost
 7 (37%) were Mid-Cost
 1 (5%) was Low Cost

Illinois

56 EC's in Illinois 35 (63%) were High Cost
 16 (29%) were Mid-Cost
 5 (9%) were Low-Cost

Florida

13 EC's in Florida 11 (85%) were High Cost
 2 (15%) were Mid-Cost
 0 were Low-Cost

Texas

56 EC's in Florida 48 (86%) were High Cost
 8 (14%) were Mid-Cost
 0 were Low-Cost

West Virginia

10 EC's in West VA 6 (60%) were High Cost
 4 (40%) were Mid-Cost
 0 were Low-Cost

Interpretation Notes:

Cost of Service:	Low =	<85% of Nat'l Avg =	≤ 211.16
	Mid =	85-114%	= 211.17-285.69
	High =	>114%	= ≥ 285.70

Table 17
Comparison of Various Poverty Indicators by States
Involved in the 7-State Study

	Free Lunch Participation Rates		Persons Below Poverty		Mean Family Income		Median Home Value		Mean Household Income	
	<u>1993-94</u>	<u>Rank</u>	<u>1990</u>	<u>Rank</u>	<u>1990</u>	<u>Rank</u>	<u>1990</u>	<u>Rank</u>	<u>1990</u>	<u>Rank</u>
Florida			12.7%	4	\$41,860	6	\$76,500	5	\$36,517	6
Elem	41.8%	3								
Mid/Jr	33.7%									
High	19.2%									
Illinois	NA		11.9%	5	\$47,259	8	\$80,100	6	\$40,885	8
Maine			10.8%	7	\$38,374	3	\$87,300	7	\$33,605	4
Elem	30.5%	4								
Mid/Jr	24.5%									
High	16.5%									
Missouri	NA		13.3%	3	\$38,856	4	\$59,300	4	\$33,441	3
Nebraska			11.1%	6	\$32,147	2	\$50,000	2	\$32,147	2
Elem	20.9%	6								
Mid/Jr	20.1%									
High	20.5%									
Nevada			10.2%	8	\$43,672	7	\$95,300	8	\$38,611	7
Elem	26.9%	5								
Mid/Jr	22.8%									
High	14.7%									
Texas			18.1%	2	\$40,255	5	\$58,900	3	\$35,618	5
Elem	45.6%	2								
Mid/Jr	36.6%									
High	26.8%									
West Virginia			19.7%	1	\$31,290	1	\$47,600	1	\$27,115	1
Elem	47.7%	1								
Mid/Jr	33.5%									
High	27.3%									

Table 18
Discounted Rates/Month for 56k, T1, and DS3
for Schools in the 7-State Study Area

Discounted 56K Rates Per Month

	<u>FL</u>	<u>ME</u>	<u>MO</u>	<u>NE</u>	<u>NV</u>	<u>TX</u>	<u>WV</u>	<u>AVG</u>
<1%	\$330	--	\$92	\$136	\$116	\$101	\$266	\$136
1-19%	219	219	75	94	214	67	178	\$121
20-34%	161	175	60	77	144	55	142	\$ 99
35-49%	105	132	37	60	112	43	107	\$ 72
50-74%	75	--	25	--	53	25	71	\$ 42
75-100%	47	--	12	--	14	12	36	\$ 18

Discounted T1 Rates Per Month

	<u>FL</u>	<u>ME</u>	<u>MO</u>	<u>NE</u>	<u>NV</u>	<u>TX</u>	<u>WV</u>	<u>AVG</u>
<1%	\$630	--	\$272	\$298	\$411	\$549	--	\$518
1-19%	415	210	184	205	308	378	--	\$331
20-34%	306	168	157	168	254	300	--	\$269
35-49%	202	126	122	130	201	235	--	\$215
50-74%	144	--	65	--	105	142	--	\$135
75-100%	87	--	31	--	51	73	--	\$ 70

**Table 18 (cont.)
Discounted DS3 Rates Per Month**

	<u>FL</u>	<u>ME</u>	<u>MO</u>	<u>NE</u>	<u>NV</u>	<u>TX</u>	<u>WV</u>	<u>AVG</u>
<1%	\$1753	--	\$1290	\$1346	--	--	--	\$166
1-19%	1178	--	967	926	--	--	--	\$1085
20-34%	961	--	766	757	--	--	--	\$894
35-49%	741	--	516	589	--	--	--	\$725
50-74%	486	--	344	--	--	--	--	\$482
75-100%	234	--	172	--	--	--	--	\$233

Interpretation Notes:

That base tariff rate to which each school's discount was applied was calculated given a common scenario across all schools of : (1) dedicated line lease for Internet, WAN, and/or video connectivity; (2) access charges to Internet provider or any bundled services excluded; and (3) assumption of 15 miles distance from school to telco central office (or hub) or 40 hours service per month. NOTE: Because it is impossible to calculate distance charges except within the constraints of a given school or district consortium, the table does NOT reflect the actual charges that would be made. It therefore can only be used in a crude estimate of total USF requirements. This analysis will be done subsequently.

Notes on Methodology

The basis for the above analysis is the merged database created from five major datasets:

- Information on all exchange carriers in the country, e.g., USF Unseparated Revenue Requirement, Number of USF Loops, Cost Per Loop, etc.;
- A separate exchange carrier database from which all exchange carriers in the country can be linked to individual schools through NPA/NXX files (Area Code and Prefix);
- A national school database which includes free lunch statistics for the majority of the 85,393 public schools in the country, as well as other basic information at a school and/or district level;
- State-level database on free lunch statistics for Illinois - (not included in above database);
- The RUPRI/CEDaR database on tariff rates in the 8-state study area, which was collected for dedicated 56k, T1, and DS3 services for the three largest carriers and three small carriers having filed tariffs (as selected by the PUC informant). The states include: Florida, West Virginia, Nebraska, Maine, Missouri, Nevada, Texas, and Illinois.

NOTE: The majority of the analysis at this point focuses on the 8814 schools and 5,670,452 students in the Local Exchange Carrier Service Area of the 18 telcos for whom tariffs were collected in the 7-state region, (yielding, roughly, a 10% sample). Because the Illinois Department of Education does not collect free lunch data at the school level--they maintain only district-level data--they have been excluded from the bulk of this analysis.

**Critical Rural Considerations Regarding
Joint Board Recommendations to the FCC
Concerning Section 254
of the Telecommunications Act of 1996
(P97-4)**



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**CRITICAL RURAL CONSIDERATIONS REGARDING
JOINT BOARD RECOMMENDATIONS TO THE FCC CONCERNING
SECTION 254 OF THE TELECOMMUNICATIONS ACT OF 1996**

RUPRI RURAL TELECOMMUNICATIONS TASK FORCE

April 8, 1997

P97-4

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*The Rural Policy Research Institute provides objective analyses and facilitates
dialogue concerning policy impacts on rural people and rural places.*

PREFACE

The Rural Policy Research Institute (RUPRI) has assembled a distinguished group of nationally recognized rural telecommunications policy analysts and practitioners, to serve as an ongoing research and decision support resource for Congressional and state legislators, as well as federal and state regulators, to assist these decision makers in assessing the rural implications of their implementation and evaluative decisions regarding the Telecommunications Act of 1996.

This Rural Telecommunications Expert Panel was chosen to reflect geographic, disciplinary, and organizational diversity. It is anticipated that membership on this panel will expand, as the scope of this work broadens to address the expanding challenges within this policy decision process. Current Panel Members are listed below:

RUPRI Rural Telecommunications Task Force

John Allen, University of Nebraska - Lincoln

Don Dillman, Washington State University

Chuck Fluharty, Rural Policy Research Institute

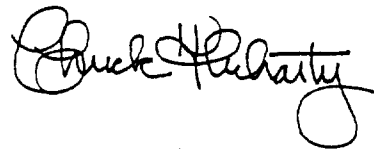
Vicki Hobbs, Missouri Interactive Telecommunications Education Network

Craig Howley, ERIC Clearinghouse on Rural Education and Small Schools,

Appalachia Educational Laboratory, Inc.

Paul Stapleton, Superintendent, Charlotte, Virginia County Schools

This analysis provides an assessment of the Joint Board's recommendations to the FCC regarding Section 254 of the Telecommunications Act of 1996, and is intended as an overview primer regarding the rural implications of this section. Leadership in drafting this document was provided by Vicki Hobbs and Craig Howley, with additional contributions from all Task Force Members.



Charles W. Fluharty
Director

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**Critical Rural Considerations
Regarding
Joint Board Recommendations to the FCC Concerning Section 254
of the Telecommunications Act of 1996**

Introduction

This analysis outlines the RUPRI Rural Telecommunications Task Force assessment of the Joint Board's recommendations to the FCC regarding Section 254 of the Telecommunications Act of 1996, and is intended as an overview primer regarding the rural implications of this section. The Task Force limited this assessment to those areas within these recommendations which contain possibly adverse or unintended rural consequences, as well as recommendations which warrant continuing assessment regarding rural impacts, should such recommendations be implemented.

In future work, it is our intent to draw out these issues and to continue to research, monitor, and provide useful information to the policy development process through ongoing substantive data collection and analysis. These issues will provide the basis for the continuing research agenda of this Task Force, to assure that implementation of Section 254 of this Act takes fully into account an informed understanding of the unique rural implications in providing equitable, affordable access to telecommunications services.

In these analyses, critical rural components of the Joint Board recommendations are listed, followed by an articulation of the issue involved, a brief background overview, and the specific rural concern or consideration which must be addressed in this context.

I. Principles

Issue: Additional principles--accountability

Background: The Joint Board acknowledges that a major FCC responsibility is to ensure that customers are "not harmed and are benefited."

Rural Concern 1: No mechanisms have been established that provide the FCC with objective information about the unintended harm or benefit shortfalls of deregulation and USF administration. Concern about such unintended harm and benefit shortfalls accruing to rural, low-income, and high-cost communities is particularly acute. Such communities lack sufficient resources to assess, document, and articulate the effects of deregulation on them. Without such information, the FCC responsibility (to minimize harm and ensure benefits)

cannot be fulfilled. This concern relates to Section 706 and to the inquiry required under that Section of the Act.

Issue: Additional principles--competitive neutrality

Background: The Joint Board recommends that USF support and rules "be applied in a competitively neutral manner." Commentors indicated the probable lack of competition in rural, high-cost, and low-income (insular) communities.

Rural Concern 2: It is not clear that the principle of competitive neutrality, in the context of universal service, embraces the prevention of the unintended negative effects of competition (e.g., potential for decreased quality of service or lack of access to advanced services) among rural, high-cost, or low-income communities. The competition in which companies engage nationally or regionally may have unfortunate side effects in rural, high-cost, or low-income (insular) communities, including the potential for decreased infrastructural investment on the part of rural carriers as a protectionist response to competition. In these communities unintended consequences may result from competition between unequal actors (e.g., small incumbent LECs and competitive carriers) unless proactive regulations are in place, negative consequences are anticipated, and state and federal regulators work in tandem.

II. Definition of Universal Service

Issues: Definition of "designated" or "core" services

Background: The Joint Board recommends that the functionalities to be included in the definition of universal service include: (1) single party service, (2) voice grade access to the public switched telephone network, (3) DTMF (touch-tone) or its functional digital equivalent, (4) access to emergency services, (5) access to operator services, (6) access to interexchange service, and (6) access to directory assistance.

Rural Concern 3: While the limits placed on the services included in the broadened definition are justifiable, given that additional services would significantly increase USF contribution levels, it will be necessary to closely monitor the ability of rural persons and communities to gain Internet access, as well as the extent to which rural customers are impeded by toll call requirements in obtaining Internet service. The extent to which competition and the perceived or actual ability of incumbent LECs to extend advanced telecommunications services to rural areas should be carefully monitored.

Issue: Periodic review of universal service definition

Background: The Joint Board recommends that the definition of universal service be re-reviewed no later than January 1, 2001.

Rural Concern 4: While the recommendation--that an initial review be conducted NO LATER than the three- to four-year time frame from initial implementation--is justifiable, we are very concerned that, apart from Section 706, no provision is made for assessing the impact of these USF rulings, or the possible need for major or minor revisions, prior to this 30-month "look back". Monitoring the transitional rural effects of these rulings, on an ongoing basis, will greatly improve future Commission decisions. We recommend that the data necessary to make decisions on expansion of the USF definitions be addressed within a very short time frame, and that all secondary sources of relevant data be identified, in order to limit the need for the collection of additional primary data from carriers.

III. Affordability

Issue: Factors of Affordability

Background: The Joint Board recommends that subscribership penetration levels, scope of calling area, and customer income level should be considered in determining affordability.

Rural Concern 5: It is well known that penetration is substantially reduced among the most low-income households (Cooper, 1996, p.12). Scope of calling area, however, is likely to be most restricted in rural areas. The relationship among these factors remains to be clarified, and that eventual clarification will likely affect the degree to which affordability is achieved in rural communities.

Issue: Affordability--jurisdiction for determination

Background: The Joint Board recommends that "states exercise primary responsibility for determining the affordability of rates."

Rural Concern 6: Diverse geographic, economic, and historic circumstances make some states more or less rural than others. Rural interests are also better articulated, and taken into account in a more substantive manner, in some states than others. It appears the Act requires the FCC to develop principles that might guide the states in determining affordability. Such guidelines would be particularly helpful in those states where rural interests are less adequately represented.

IV. Carriers Eligible for Universal Service Support

Issue: Definition of service areas

Background: The Act states in section 214(e)(5) that "service area" equates to the rural telephone company's study area "unless and until the Commission and the States, after taking into account the recommendations of a Federal-State Joint Board instituted under section 410(c), establish a different definition of service area for such company."

Rural Concern 7: Should the service area of a rural telephone company be reduced or fractionalized from that company's current study area for any immediately foreseeable reason, the risk of selective area service by a competitor, e.g., skimming, may increase greatly, thus seriously affecting the cost, and access, to designated services by remaining rural customers, as well as the ability of incumbent LECs to offer those services.

Issue: Unserved areas

Background: The Joint Board recommends that the Commission not adopt any particular rules to govern how carriers for unserved areas are designated

Rural Concern 8: The failure to deal with this issue in a timely manner may jeopardize the goal of affordable access in rural and high cost areas. Specific study of the two considered options warrants attention: (1) cooperative Commission or State designation of the common carrier(s) best able to provide such service; or (2) competitive bidding to select carriers for unserved areas. Both options should be weighed against the potential impact on rural customers.

V. Rural, Insular, and High Cost Support

Issue: Transition Plans for Rural Areas

Background: In rural areas (excluding Alaska and insular areas) the Joint Board has recommended a three-year delay in the implementation of a proxy model as the basis for calculating costs during which high cost assistance, DEM weighting, and LTS benefits would be frozen at 1997 levels. During a second three-year period, rural areas would transition to a separate rural proxy model.

Rural Concern 9: The Joint Board defines the salient rural issue as "difficulty in precisely modeling small, rural carriers' costs." Competitively neutral regulations demand careful monitoring of transition effects on these locally owned rural enterprises. One potential danger is damage done to rural communities and economies by competition unintentionally

engineered to destabilize rural telecommunications carriers whose motives and economic actions are not always driven by the maximization of profits. Furthermore, the timing of the proposed transition appears to begin before the end of the Act's 30-month review period, by freezing levels of support under the embedded cost model at 1997 levels.

Issue: High Cost Support--National Benchmark

Background: The Joint Board recommends that a nationwide revenue benchmark (based on the revenues-per-line divided by the number of loops served) be created for residential service and another for single business lines. These would be used in the calculation of USF support.

Rural Concern 10: The Joint Board believes that implementation of a nationwide benchmark will be most beneficial in encouraging competition that would prospectively benefit customers in high cost areas. This is a key mechanism to facilitate benefits to rural areas; the benefits, however, are predicted. The actual effects of implementing such a benchmark are by no means clear, nor are the short- or long-term effects on rural carriers.

Issue: Setting Level of USF Support in Rural, Insular, and High Cost Areas

Background: Although the Joint Board does not endorse a competitive bidding process for setting the level of USF support in rural, insular, and high cost areas at this time, it recommends continued examination of the possibility.

Rural Concern 11: One projected effect of using competitive bidding to set the level of support for universal service fund (USF) reimbursement is to lower the overall level of support. An unforeseen outcome may be the failure of any carrier to submit a competitive bid in certain high cost rural areas. Early attention to the possible unintended or unforeseen circumstances with respect to competitive bidding will surely yield an improved implementation strategy. Furthermore, while competitive bidding may put all prospective eligible carriers on an equal footing, it may also tend to decrease rural access to advanced services, if incumbent carriers are undercut in the bidding process to supply basic services.

Issue: Insular Area Access to Toll-Free Calling

Background: Access to toll-free calls appears to be chief among the unique issues raised by commenters from island territories of the U.S. The Joint Board postpones measures to ensure delivery of genuine toll-free service and further articulates the position that provision of toll-free service "is a business decision of the

carrier's business customer".

Rural Concern 12: Although access to toll-free calling is not defined per se as an eligible universal service at this time, insularity clearly reduces access to a range of information services (e.g., Internet access) in these rural areas. The tendency of some carriers to restrict access to services in rural, insular, and high cost areas must be a concern in efforts to support an evolving level of universal service. If this regulation is intended to diffuse the negative consequences of insularity, perhaps access to toll-free calling should be considered in future definitions of basic service.

VI. Support for Low-Income Consumers

Issue: Lifeline Assistance Program

Background: Section 254(b)(3) states that consumers in all regions of the Nation--including low-income consumers--"should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to rates charged for similar services in urban areas." The Act further instructs the "Joint Board and the Commission to base policies for the preservation and advancement of universal service on the principle that universal service should be available for low-income individuals in all regions of the nation", while maintaining that "nothing shall affect the collection, distribution, or administration of the Lifeline Assistance Program".

Currently the Lifeline program is supported entirely by the IXC's outside the universal service fund mechanism and is not available to low-income consumers in areas where the incumbent LEC has chosen not to participate. The Lifeline and Link Up programs are currently in effect in only 41 states, the District of Columbia, and US Virgin Islands.

The Joint Board proposes to eliminate the requirement for intrastate matching support as a condition of receiving federal support for Lifeline, to provide for an increased level of federal support from \$3.50 to \$5.25, and to provide additional federal support equal to one half of any support generated from the intrastate jurisdiction, up to a maximum of \$7.00 in federal support.

Rural Concern 13: As the Joint Board is aware, concern over current recommendations stems from the possibility that no increase in customer access to Lifeline programs will result, i.e., only a larger percentage of the current level of support will be generated from federal

funds. In order to: (1) insure low-income access to Lifeline support in all states at a meaningful level of customer savings; (2) insure state-level participation in the Lifeline program; and (3) distribute the burden across both federal and state jurisdictions, it may be prudent that the prerogative for tying state participation in the Lifeline program to carrier eligibility for federal universal service fund reimbursement be further investigated, regarding ramifications on low-income customers.

VII. Support for Schools and Libraries

Issue: Internet Access

Background: The Joint Board finds that Internet access need not be provided as a local call.

Rural Concern 14: Many rural schools and libraries will encounter prohibitively expensive long-distance tolls in accessing the Internet. The effect of providing USF support via a discount mechanism for telecommunications services and Internet access is predicted to be positive but access to the Internet by rural, isolated, or insular schools is in no way assured.

Issue: Discount Methodology and Cost Estimates

Background: The Joint Board, in reviewing comments pertinent to cost estimates, cites the McKinsey Report as providing estimates for six categories of costs, only two of which, representing 20 percent or less of the total cost of using Internet services in schools, are eligible for USF support. Support cannot be provided for computers, software ("content"), professional development, and systems operation.

Rural Concern 15: Although the Act encourages rapid deployment of advanced telecommunications services to schools, it cannot ensure their effective use once deployed. The fact that at least 80 percent of necessary costs are not eligible for USF support underscores the challenge that schools face in effectively using the technology. Rural schools traditionally have difficulty providing adequate professional opportunities, for instance. Inadequate traditional funding, characteristic of low-income rural communities, can mean that satisfactorily deployed technology fails to realize its educative potential in rural schools, unless additional, coordinated sources of funding are directed toward the non-USF reimbursable expenses associated with Internet and other telecommunications technology usage, e.g., through §708 National Education Technology Funding Corporation, and/or § 714 Telecommunications Development Fund.

Issue: Discount Methodology--Pre-Discount Price

Background: The Joint Board recommends (1) competitive bidding for

services to schools and libraries, (2) use of the lowest bid corresponding to the "lowest price charged to similarly situated non-residential customers for similar services" as the ceiling price ("lowest corresponding price") for services thus bid, and (3) bidding by consortia of schools, libraries, and health care providers as a means to secure competitive bids, including bids in rural areas.

Rural Concern 16: (1) Reference to the comparative lack of competition among telecommunications and Internet service providers in rural, insular, and high cost areas is omitted in the Joint Board's discussion, though it figures in recommendations about universal service provision for residential and single-line business customers in such areas. (2) The pre-discount price recommendation assumes that a similarly situated non-residential customer being provided similar services can be identified. (3) The recommendation also assumes that consortia will be widely formed in rural areas, and that, if widely formed, the aggregate demand from such consortia will actually be able to secure competitive bids.

Issue: Discount Methodology--Eligible Entities

Background: For the most part, schools appear in the Joint Board recommendations as the entities eligible to purchase services, and, in fact, the applicable statutory language stresses connectivity to schools and access within classrooms.

Rural Concern 17: Safeguarding the integrity of local control of schools is a major concern in rural, as in many other, areas. However, fiscal control usually rests with Local Education Agencies (LEAs, also known as "school districts"). The role of LEAs as potential purchasers of services and their relationship to individual schools under their authority is not clear in the recommendations of the Joint Board. If "affordability" measures, such as participation in the national school lunch program, are used, much different effects are incurred by the use of "district" vs. "school" level data. Furthermore, no one national source of "school" level data exists with respect to school lunch program participation.

Issue: Discount Methodology--Discount Structure

Background: The Joint Board suggests a discount structure providing varying discounts ranging from 20 to 90 percent based on two dimensions--relative disadvantage and relative cost of service.

Rural Concern 18: Costs of telecommunications and Internet services are typically highest in rural areas, as are costs of voice-grade services. Indeed, even eliminating current high cost support mechanisms, the rural-urban differential is much greater for data and video services than for voice-grade services. The high-cost dimension of the proposed discount structure,

however, provides for no more than a 10% differential between low-cost and high-cost areas within given categories of disadvantage. In fact, at rates of disadvantage above 49%, there is no differential by cost. This means that among rural and urban schools and libraries serving equally poor communities, the discount structure ensures that rural communities will pay proportionately higher prices--proportional differences that could be substantially higher.

Issues: Discount Methodology, Matrix Dimensions, and Variables

Background: The Joint Board recommends use of (1) a disadvantage dimension based on the rate of free-and-reduced-price-meal rates prevailing among schools or districts and (2) an estimated cost of service dimension divided into three categories (low cost, representing an estimated 67% of schools and libraries; mid-cost, representing an estimated 26% of schools and libraries; and high-cost, representing an estimated 7% of schools and libraries)

Rural Concern 19: Problems abound with the use of national school lunch data: (1) Participation in the national school lunch program does not imply income "eligibility", as the Joint Board's recommendations indicate; rather it is a measure of actual participation in the program, a factor affected by many intervening circumstances. (2) A significant literature documents the underutilization of social services by rural residents, such as the free-and-reduced-price-meal program, resulting in a substantial undercounting of low-income students in rural areas. (3) High school students, wherever located, subscribe to the program at a rate much lower (often as much as 50% lower) than the subscription rate of elementary students. (4) Low-income transient students are not likely to be reflected in free lunch data in proportion to their enrollment. (5) The number of rural schools adversely impacted by using participation in the national free lunch program as the criteria for "affordability" could, under a narrow definition of "rural," range up to 1/3 of all schools and 1/4 of all students. (6) No national source of school lunch program participation data exists for "reduced" lunch categories, while Common Core Data acknowledges the inclusion of "reduced" percentages in the "free lunch" statistics reported for some states. (7) An equitable methodology for extrapolating public school district data for private schools and libraries would need to be devised.

While showing merit as a potential delimiter of cost of service, the use of unseparated loop costs bears further examination, not only in terms of the percentages of carriers which fall into each of the three cost categories as defined, but also with respect to further study of the NECA data on unseparated revenue requirements, number of loops, and USF cost per loop, by state and carrier.

Issue: Restrictions Imposed on Support

Background: The Joint Board recommends that mixed consortia of eligible and ineligible entities (e.g., colleges with K-12 schools; libraries with municipalities) be permitted so as to increase competitive bidding, but with appropriate accountability mechanisms to prevent "illegal resale through misallocation". It also recommends prohibition of nonprofit resale of services by eligible institutions as well as for-profit resale.

Rural Concern 20: In many places there are already too few institutions to create aggregated demand sufficient to secure competitive bids; most rural towns do not have a school, a library, and a hospital; and many rural places where there are communities are not even towns. Community survival and sustainability in the information age is a key rural concern. The recommendations about consortia and resale appear to overlook the circumstances of small rural communities, including the desirable opportunity to be able to potentially recover costs through the collaborative use of telecommunications facilities by the community. Exploration of an acceptable shared use policy which does not unduly impinge on the carrier's potential for sale of additional telecommunication services to the business community is warranted.

Issue: Support for Schools and Libraries--Section 706 Implications

Background: Section 706 of the Act requires the FCC to make regular inquiry about the deployment of advanced telecommunications services to all Americans. It empowers the FCC to accelerate such deployment of advanced telecommunications services should it find, as a result of inquiry, that deployment is not occurring in "a reasonable and timely fashion". The goal of Section 706 is to ensure the access of all Americans to advanced telecommunications services. The Joint Board concludes that pertinent rulemaking for Section 706 should take place within 36 months following enactment of the Act.

Rural Concern 21: A possible role for schools, libraries, and/or health care providers as "anchor tenants" (in an analogy with mall development) in rural communities has been promoted by some rural observers, but is prohibited on the basis of the recommendations of the Joint Board. The feasibility of the anchor-tenant strategy, or variants, for advancing the goals of Section 706 warrants investigation.

VIII. Support for Health Care Providers

Issue: Services Eligible for Support

Background: The Joint Board recommends that the "Commission solicit

information and expert assessments of the exact scope of services that should be included in the list of those additional services necessary for the provision of health care in a state” and on the “most cost effective ways to provide these services to rural America”.

Rural Concern 22: It should be fairly easy to develop a list of currently applicable uses of telecommunications technology which support the provision of health care in rural areas. Indeed, the Advisory Committee has gone a long way in already doing just that. Of concern, however, is the implied suggestion that there should be an effort to explicitly define each service in terms of the bandwidth requirements for each. There is further concern that to have any entity other than the eligible health care provider determine the bandwidth requirements would risk the provision of the service at bandwidths inappropriate to the needs of the provider or the incurring of unnecessary universal service obligations. More effort should be focused toward development of a system which predetermines the scope of relevant health care services for which universal service support may be available, while leaving specific bandwidth requirements to the discretion of the individual health care provider. The provision of universal service support on that portion of rural health care costs (for specific services) which exceeds that for the closest urban area should be further investigated.

Issue: Limitation of USF Support to “Core” Services

Background: Congress intended that “universal service support mechanisms be used to ensure that rural Americans are not denied access to health care services that are more readily available to their fellow citizens residing in urban areas because of the unavailability or higher cost of telecommunications services.”

Rural Concern 23: To limit the application of universal service support to only “core” services may do little or nothing to support the provision of rural health care as intended by the Act. Specific attention should be devoted to identifying those advanced services which will significantly enhance the provision of health care in rural, insular, or high cost areas, for instance, the various uses enabled by telemedicine.

Issue: Distance-Sensitive Rates

Background: The Joint Board has declined to recommend that the Commission eliminate or reduce distance-sensitive charges at this time, due to the lack of sufficient evidence regarding the costs of excluding distance-based charges in establishing the comparable urban rate.

Rural Concern 24: Until an alternative to distance-sensitive and cross-LATA charges is

identified, it is evident that rural health care providers (just as rural schools and libraries) will remain at a price disadvantage with respect to their urban counterparts. These concerns regarding the "scope of calling area" relate to the operative principle desired whether the criteria is number of individuals with whom you can connect, or square mileage covered.

Issue: Calculating the rural rate

Background: The Commission has stated that "the amount of credit or reimbursement to carriers from health care support mechanisms should be based on the difference between the price actually charged to eligible health care providers and the rates for similar, if not identical, services provided to "other customers" in the rural areas of that state.

Rural Concern 25: This approach seems to beg the point. The issue is not whether health care providers have access to services at rates below that paid by other rural customers, but whether all rural customers, including health care providers, have access to rates comparable to urban areas.

Issue: Defining rural and urban areas

Background: In defining rural and urban areas, the Joint Board recommends using the OMB MSA list of metro and non-metro counties, together with the non-metro counties (by census blocks and tracts) identified in the most currently available "Goldsmith Modification". Alternate definitions may be considered, including use of Johnson codes (devised by NCES) regarding schools and districts, or Beale county codes, thereby avoiding the inherent problems in defining rural as non-metro without further specificity, i.e., according to these definitions, many non-metro counties are primarily suburban.

Rural Concern 26: In so expansively defining "rural areas", the risk of overtaxing any universal support mechanism is increased. More effort should be devoted to studying the impact of such definitions of "rural", and their concomitant effect on universal service drawdown.

Issue: Definition of health care provider

Background: The definition of "health care provider" as included in the Act does not include any not-for-profit public health or medical professional development organizations.

Rural Concern 27: Given the intent of the Act to include “instruction related to such health care services”, it would seem that additional consideration might be given to not-for-profit entities devoted to continuing medical education, perhaps through a mechanism allowing for individual state authorization for extending the definition of “eligible health care providers” to such organizations on a case-by-case basis.

Issue: Restrictions on resale and aggregated purchases

Background: Section 274(h)(3) provides that “telecommunications services and network capacity provided to a public institutional telecommunications user under this subsection may not be sold, resold, or otherwise transferred by such user in consideration for money or any other thing of value.”

Rural Concern 28: As with schools and libraries, there is concern that the unilateral restriction on the partial recovery of costs by institutions allowing wider-spread community use of subsidized dedicated facilities will both unfairly inhibit the ability of rural health care institutions to participate in advanced telecommunications services and deny the wider-spread access to community-based telecommunications facilities intended for the public good.

IX. Interstate Subscriber Line Charges/Carrier Common Line Charges

Issue: Revision of SLC and CCL charges (including LTS payments)

Background: The Joint Board has been inconclusive in their recommendations with respect to modifications in the current process for recovery of interstate loop costs, tentatively recommending that Long-Term Support (LTS) be recovered from the new federal universal service support mechanism and that, if the Commission allows both inter-and intrastate revenues as the revenue base for assessing interstate telecommunications carriers’ contributions to the new national universal service support mechanism, there be a downward adjustment in the Subscriber Line Charge (SLC) cap for those lines, as well as Carrier Common Line (CCL) charges, to reflect the recovery of Long-Term Support (LTS) and pay telephone costs from other sources.

Rural Concern 29: Regardless of the final disposition of these issues, the effect on those telecommunications carriers serving rural areas and on rural customers themselves is unknown. An effort should be undertaken to document the longitudinal effect on carriers and customers resulting from such regulatory changes, in order to make mid-stream modifications to the process on an informed basis.